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动物分类学报

TAXONOMY OF THE SUBGENUS STIGMATOCHIRUS OF PRIOCHIRUS (COLEOPTERA, STAPHYLINIDAE, OSORIINAE) FROM CHINA

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Abstract Priochirus Sharp, 1887, is a successful rove beetle genus well adapted to habitats associated with dead wood, and is an important composition of saproxylic community. In this genus, the subgenus Stigmatochirus Bernhauer, 1903, is a species-rare group with only 3 species worldwide up to now. In our paper, we describe a new species, Priochirus (Stigmatochirus) magnificus sp. nov., from Yunnan Province, China. A species, P. (Stigmatochirus) abori Bernhauer is recorded for the first time from China. A key to the world species of this subgenus is presented in the paper. All the specimens, including the types, are deposited in Institute of Zoology, Chinese Academy of Sciences.

Key words Priochirus, Stigmatochirus, new species, new record, China.

The genus Priochirus was separated from Leptochirus Germar, 1824, by Sharp (1887). This genus is a successful group well adapted to habitats associated with dead wood. It is a species-rich group and shows remarkable specialization and high diversity in external morphology. The species of this genus are distributed mainly in the Oriental Region. Bernhauer (1903) divided Priochirus into 9 subgenera, of them the subgenus Stigmatochirus Bernhauer, 1903, as one could be distinguished from other congeneral subgenera by the densely pubescent and punctate clypeus and pronotum. Greenslade (1971) revised again this genus and divided it into 11 subgenera: Barychirus Greenslade, 1971, Cephalomerus Bernhauer, 1903, Euleptarthrus Jakobson, 1908, Eutriacanthus Jakobson, 1908, Exochirus Greenslade, 1971, Leiochirus Greenslade, 1971, Peucodontus Bernhauer, 1903, Plastus Bernhauer, 1903, Priochirus s. str., Stigmatochirus Bernhauer, 1903, and Syncampsochirus Bernhauer, 1903. This classification is now followed by most taxonomists.

Before our study, the subgenus included only 3 species: Priochirus (Stigmatochirus) abori Bernhauer, 1926, from India; P. (Stigmatochirus) dohrni Fauvel, 1902, from Indonesia; P. (Stigmatochirus) chapmani Greenslade, 1971, from Vietnam, Laos and Thailand. No species was recorded in China. In this paper, we describe a new species, Priochirus (Stigmatochirus) magnificus sp. nov., from Yunnan Province, China. The species P. (Stigmatochirus) abori Bernhauer is recorded for the first time from China.

The following abbreviations are used in the text: HL: head length (from front of lateral lobe to hind margin); PL: pronotum length; EL: elytron length; HW: head width; PW: pronotum width; EW: width of both elytra together. The measurements are in millimeters (mm) and were done using the microscope ZEISS stemmi 2000-c at 25 × magnification. This study is based on the specimens in the collection of IOZ-CAS (Institute of Zoology, Chinese Academy of Science). All types are deposited in the same institute.

Priochirus Sharp, **1887**

Priochirus Sharp, 1887: 740; Fauvel, 1878: 184; Bernhauer, 1903: 116; Bernhauer and Schubert, 1910: 15; Cameron, 1921: 350; Cameron, 1930: 95; Scheerpeltz, 1933: 1001; Greenslade, 1971: 126; Shibata, 1973: 25; Naomi, 1996: 1; Herman, 2001: 1108; Smetanna, 2004: 505. Type species: Priochirus haemorrhous Sharp, 1887, fixed by subsequent designation by Blackwelder, 1952.

Subgenus Stigmatochirus Bernhauer, **1903** New record to China

Stigmatochirus Bernhauer, 1903: 141, 159; Bernhauer and Schubert, 1910: 16; Cameron, 1930: 109; Scheerpeltz, 1933: 1004; Blackwelder, 1952: 215; Greenslade, 1971: 155; Greenslade, 1972: 208; Herman, 2001: 1109. Type species: Leptochirus dohrni Fauvel, fixed by monotypy.

Frontal impression reduced, narrow, elongate.

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Clypeus large and projecting, densely punctate and setose. Front of head with two small lateral teeth and a pair of lateral tubercles. Mentum with sides concave, uniformly punctate. Head, except discs of lateral lobes, and pronotum, except for a transverse central area, coarsely punctate and pubescent (Greenslade, 1971).

Key to the world species of the subgenus Stigmatochirus Bernhauer

1. Posterior margin of clypeus angulate and V-shaped; penultimate segment of antenna strongly transverse, almost twice as wide as long ……………………………… P. (Stigmatochirus) dohrni Fauvel
Posterior margin of clypeus curved; penultimate segment of antenna slightly transverse …………………………………………………… 2
2. The third segment of antenna slightly longer than the 2nd one ……………………………………… P. (Stigmatochirus) abori Bernhauer
The third segment of antenna at least twice as long as the 2nd one ……………………………………………………………………… 3
3. Elytra distinctly wider than long ……………………………………………………………… P. (Stigmatochirus) chapmani Greenslade
Elytra near square … P. (Stigmatochirus) magnificus sp. nov.

Priochirus (Stigmatochirus) magnificus sp. nov.
(Figs. 1-11)

Body length 14-16 mm. HW: 1.92mm, HL: 1.04 mm, PW: 2.72 mm, PL: 1.76 mm, EW: 3.04 mm, EL: 3.12 mm.

Body convex, almost cylindrical. Head and pronotum black. Elytra black, but sometimes slightly red-black. Femora black, tibiae and tarsi dark-red. Antenna brown.

Head (Fig. 1) transverse, frontal impression broadly depressed, on basal side of clypeus with two pairs of teeth, frontal pair elongate and sharp, hinder pair small and blunt. Median sulcus broad, as long as diameter of eyes, narrowed frontally. Lateral lobes broadly elevated and impunctate, anterior margin with a small and blunt lateral tubercles. Other part of the vertex covered with dense punctures and setae. Clypeus elongate with frontal margin truncated, covered with extra dense and long yellow pubescence.

Labrum (Fig. 7) frontally and laterally rounded, closely covered with long and short setae, on the side of anterior margin with two membraneous lobes projecting and ciliate. Mandible (Fig. 8) robust, punctate and setose on outer face, dorsal tooth sharp, apical tooth biforked, between them with a very small tooth. Inner lobe of maxilla (Fig. 9) elongate, with five robust and pointed teeth at the apex, the inner margin ciliate and dentate, outer lobe narrower, top part ciliate densely. Mentum (Fig. 10) trapeziform and densely setaceous. Glossa frontally truncated and ciliate, on each side with one long seta. Paraglossa ciliate and separated from glossa (Fig. 11).

Antennae short, weakly geniculate, posteriorly reaching the frontal margin of elytra, 1st segment baculiform, apically emarginated, 2nd small, 3rd long and narrowed at base, beyond twice as long as 2nd, 4th to 7th moniliform, 8th to 10th slightly transverse, 11th elongate, apically rounded, about 1.5 as long as 10th. All segments covered with long setae, especially at inner side of 2nd to 4th segments.

Pronotum convex and rectangular, frontal margin sinuate, lateral side rounded, posterior margin edged and protruding in the middle, posterior angle weakly angulate, median longitudinal sulcus narrow and deep, slightly expand at posterior end, disc densely punctate, except for the central area, with two or three distinct larger punctures near the middle.

Protibiae broadened apically, crenulate externally, with 11-13 denticles.

Elytra almost square, laterally and frontally finely punctate and pubescent, disc shining and smooth.

Abdomen cylindrical, micropunctures denser on basal half of each segment, long pubescent especially denser on lateral and anterior part of each segment, but 7th and 8th uniformly dense.

Male. Aedeagus (Figs. 2-3) with median lobe slightly bulbous at base, constricted and curved behind basal orifice, weakly sclerotized on the dorsal side and truncated at apex; parameres short, thin and pointed, with basal part deeply emarginate, protruding dorsally and connecting each other to form a characteristic triangular structure. Ninth tergite sclerotized and left and right plates separated, each with 12 setae of various length. Tenth tergite almost membraneous except for sclerotized apical part, posterior margin deeply emarginate in middle, each side with 9 long setae (Fig. 5). Ninth sternite composed of two plates, apical plate sclerotized except for membraneous apex, with four pairs of setae, basal plate less sclerotized, broadened in middle (Fig. 4).

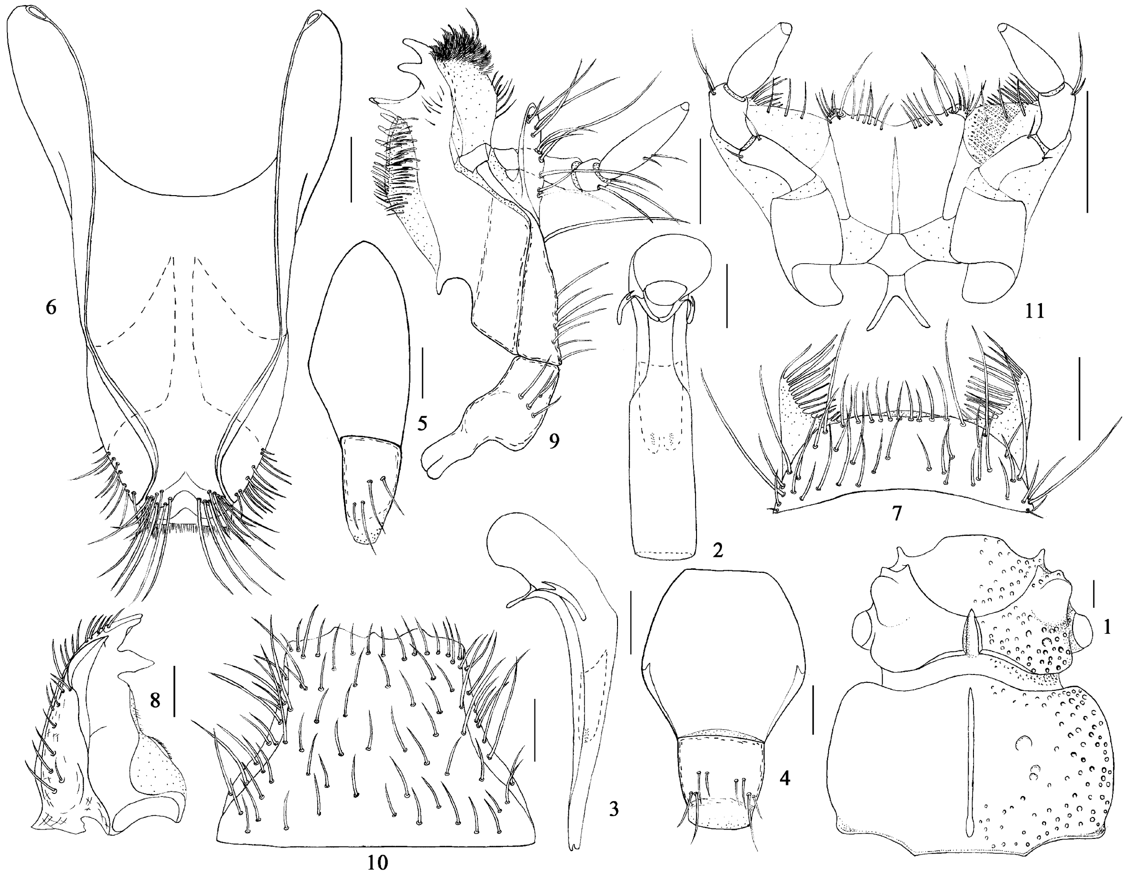
Female. Ninth sternite (Fig. 6) with hemisternite less sclerotized, anterior margin sharply protruding, second gonocoxite strongly sclerotized except for membraneous apex, with four setae.

Holotype ♂, Yunnan, Xishuangbanna, Mengla, 690 m, 14 Feb. 2004, WU Jie leg. Paratypes 4 ♀♀, Yunnan, Xishuangbanna, Mengla, 690m, 14 Feb. 2004, WU Jie leg.

Etymology. The species name is a Latin adjective, magnificus, which means large.

Distribution. Yunnan.

Remarks. This new species is similar to P. (S.) abori, but differs from the latter by a larger body size, less punctate and setose elytra, and longer 3rd segment of antenna (about twice as long as 2nd). This species also allies morphologically to P. (S.) chapmani, but with longer and sharper teeth on each side of clypeus, and almost square elytra (not distinctly wider than long). The new species can be easily separated from P. (S.) dohrni by a less transverse penultimate segment of antenna and a curved posterior margin of clypeus.



Figs. 1-11. Priochirus (Stigmatochirus) magnificus sp. nov. 1. Head and pronotum in dorsal view. 2. Aedeagus in dorsal view. 3. Aedeagus in lateral view. 4. 9th sternite of male. 5. Left half of 9th sternite of female. 6. 9th and 10th tergites of male. 7. Labrum. 8. Left mandible. 9. Maxilla. 10. Mentum. 11. Ligula and labial palpi. Scale bars = 0.25 mm.

Priochirus (Stigmatochirus) abori Bernhauer, **1926** New record to China (Figs. 12-17)

Bernhauer, 1926: 19; Cameron, 1930: 109; Scheerpeltz, 1933: 1004; Greenslade, 1971: 130; Herman, 2001: 1 110.

Body length 11-12 mm. HW: 1.83 mm; HL: 0.95 mm; PW: 2.96 mm; PL: 1.89 mm; EW: 3.15 mm; EL: 3.02 mm

Body convex, almost cylindrical. Head and pronotum black. Elytra and abdomen slightly dark brown. Femora and tibiae reddish, tarsi orange. Antennae brown.

Head (Fig. 12) transverse, frontal impression broadly depressed, on basal side of clypeus with two pairs of teeth, frontal pair elongate and sharp, hinder pair smaller. Median sulcus broad, slightly longer than diameter of eyes. Lateral lobes broadly elevated and impunctate, anterior margin with a small and blunt lateral tubercles. Other part of the vertex covered with dense punctures and setae. Clypeus elongate with frontal margin truncated, covered with dense and long yellow pubescence.

Antennae short, weakly geniculate, posteriorly reaching the frontal part of elytra, 1st segment baculiform, apically emarginated, 2nd small, 3rd little longer than 2nd, 4th to 8th moniliform, 9th to 10th slightly transverse, 11th elongate, apically rounded, about 2 as long as 10th. All segments covered with long setae, especially at inner side of 2nd to 4th segments.

Pronotum convex and rectangular, frontal margin sinuate, lateral side rounded, a little more retracted in front than behind, posterior margin edged and protruding in the middle, posterior angle distinctly angulate, median longitudinal sulcus narrow and deep, slightly expand at posterior end, disc densely punctate, except for the central area.

Protibiae broadened apically, crenulate externally, with 15 or 16 denticles.

Elytra almost quadrate, laterally and frontally finely punctate and pubescent, the disc obsoletely and more sparingly.

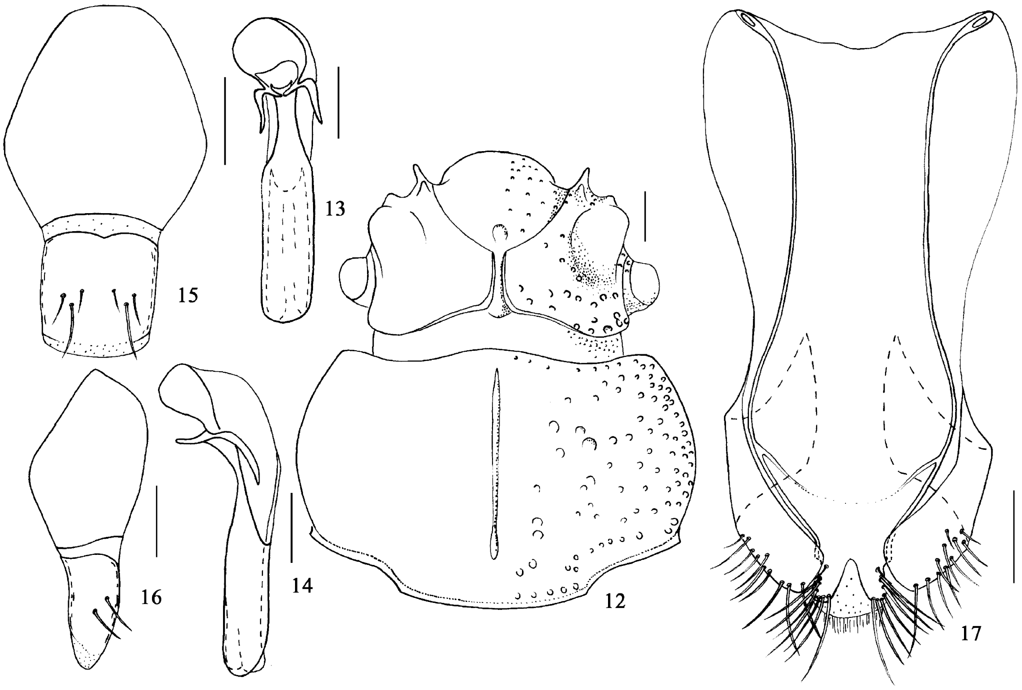
Abdomen cylindrical, micropunctures denser on basal half of each segment, some shallow and larger punctures sparsely scattered on the anterior part, pubescence especially denser on basal and anterior part of each segment, but 7th and 8th uniformly dense, sparsely covered with some larger punctures.

Male. Aedeagus (Figs. 13-14) with median lobe slightly bulbous at base, constricted and curved behind basal orifice, weakly sclerotized on the dorsal side and rounded at apex; parameres short, thin and pointed, protruding dorsally and connecting each other to form a characteristic triangular structure. Ninth tergite sclerotized and left and right plates separated, each with 11 setae of various length. Tenth tergite almost membraneous except for sclerotized apical part, posterior margin deeply emarginate in middle, each side with 8 long setae (Fig. 17). Ninth sternite composed of two plates, apical plate sclerotized except for membraneous apex, with three pairs of setae, basal plate less sclerotized, broadened in middle (Fig. 15).

Female. Ninth sternite (Fig. 16) with hemisternite less sclerotized, anterior margin sharply protruding, second gonocoxite strongly sclerotized except for membraneous apex, with two setae.

Specimens examined. 2 ♂♂, 1 ♀, Tibet, Motuo, Gedang, 700 m, 24 Sep. 1982, HAN Yin-Heng leg.; 1 ♀, Tibet, Motuo, 1 100 m, 21 Jan. 1982, HAN Yin-Heng leg.; 1 ♂, Tibet, Motuo, 800-1 100 m, 7 Jan. 1983, HAN Yin-Heng leg.; 1 ♂, Tibet, Motuo, 800-1 100 m, 27 Jan. 1983, HAN Yin-Heng leg.

Distribution. Tibet; India.



Figs. 12-17. Priochirus (Stigmatochirus) abori Bernhauer, 1903. 12. Head and pronotum in dorsal view. 13. Aedeagus in dorsal view. 14. Aedeagus in lateral view. 15. 9th sternite of male. 16. Left half of 9th sternite of female. 17. 9th and 10th tergites of male. Scale bars = 0.25 mm.

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中国齿隐翅虫属斑齿隐翅虫亚属（鞘翅目，隐翅虫科，筒隐翅虫亚科）分类学研究

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摘　要　齿隐翅虫属 Priochirus 种类多见于腐木树皮下，是重要的腐木甲虫。其中斑齿隐翅虫亚属的物种比较稀少，目前全世界仅记录3种。本文记述产于我国云南的齿隐翅虫属斑齿隐翅虫亚属1新种，硕斑齿隐翅虫 Priochirus (Stigmatochirus) magnificus sp. nov.，及1新纪录种，阿斑齿隐翅虫 Priochirus (Stigmatochirus) abori Bernhauer。文中物种检索表包括了世界现有的3种及新种共4个种。所有标本材料（包括所有模式标本）都保存在中国科学院动物研究所。

关键词　齿隐翅虫属，斑齿隐翅虫亚属，新种，新纪录，中国.

中图分类号　Q969.484.4

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